



State of Utah

Department of  
Environmental Quality

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**MEMORANDUM**

**TO:** Air Quality Board

**THROUGH:** Richard W. Sprott, Executive Secretary

**FROM:** Robert Clark, Environmental Scientist

**DATE:** September 6, 2006

**SUBJECT:** Deletion of R307-332 from the Air Quality Rules

**Background:**

Section 182(b)(3) of the Clean Air Act (CAA), 42 U.S.C. 7511a(b)(3) originally required that a Stage II vapor recovery program be established for "moderate" or worse ozone nonattainment areas. A Stage II vapor recovery program requires that gasoline stations install equipment to capture emissions during vehicle refueling. Since Salt Lake and Davis Counties were moderate nonattainment areas, a Stage II vapor recovery rule (R307-332) was adopted. However, section 202(a)(6) of the CAA also states that the Section 182(b)(3) Stage II requirement shall not apply in moderate areas after on-board refueling vapor recovery (ORVR) standards are promulgated. The ORVR regulations were promulgated on April 16, 1994 and installation of ORVR components commenced on new vehicles beginning in 1998.

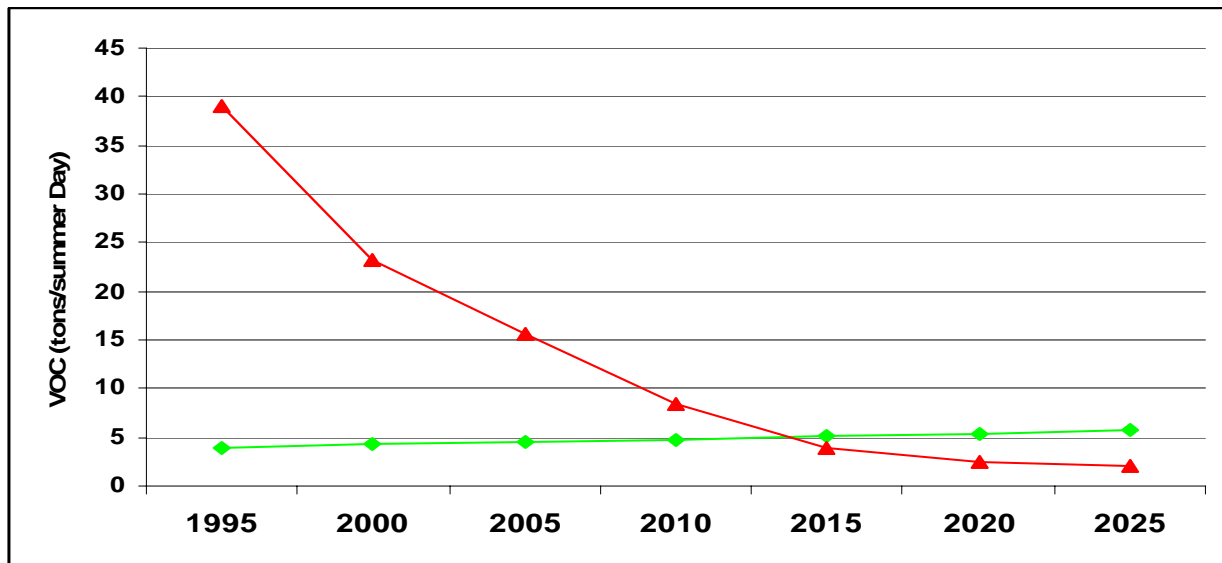
Utah kept the Stage II Vapor Recovery rule as a contingency measure for the 1-hour ozone maintenance plan. The rule was not federally approved because contingency measures for maintenance plans are not required to be automatically implemented, and EPA wanted to provide flexibility if contingencies were needed.

**Reasons for not retaining R307-332:**

The original Stage II Vapor Recovery System (VRS) was designed to reduce volatile organic compounds (VOC) and hazardous air pollutants (HAPS) from being emitted during refueling of

cars and light duty trucks. It was modeled after the existing California VRS plan and would have been a very expensive (\$30,000 to \$50,000/station) and politically unpopular system to implement. In addition, there is a point at which the combination of both Stage II VR and ORVR control measures could result in incompatible excess emissions and actually increase emissions.

When the requirement for Stage II VRS was adopted as a contingency measure in early 1993, the expected emission reductions were significant and were anticipated to remain effective for at least fifteen years. As ORVR equipped vehicles became a greater part of the fleet, the expected benefits of Stage II VRS began to decrease. The red line in the graph below shows how the implementation of ORVR has reduced VOC emissions without Stage II VRS. The green line shows expected emissions with Stage II VRS. As can be seen, the benefit of Stage II VRS is decreasing rapidly, and the expected emissions reductions can no longer justify the expense of implementing Stage II VRS.



Other contingency measures that are considered more appropriate are included in the 8-hour ozone maintenance plan.

Recommendation: Staff recommends that R307-332 be deleted.